

# **ETA Initiative: Optional Account Features**

Economic Waterfall Analyses

June 26, 1998



## Introduction

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The ETA product design and distribution system recommended by Dove Associates was described in the June 15<sup>th</sup> report on the ETA Initiative. FMS requested that additional analyses be conducted to assess the likely cost impact of potential ETA product enhancements. This report provides economic waterfall analyses which examine the impact that three ETA optional account features could have on participating financial institutions monthly pre-tax profit contribution per ETA. The three optional features examined using waterfall analyses are:

- Savings
- Third-party electronic debit for bill payment
- Additional electronic deposits

The format of these economic waterfalls are consistent with those presented previously and include the same revenue and cost categories as utilized previously. However, each of these optional features adds complexity and costs to previously recommended ETA product functionality and therefore necessitate the inclusion of new cost line items to model these optional features.

## Summary

Each additional feature increases the complexity of the ETA product for both the FI and the accountholder. The incorporation of these features would reposition the ETA from a very simple real-time cash access product for direct federal benefit recipients to an increasingly sophisticated financial product. These analyses do not consider any additional costs for marketing ETAs or training accountholders that may be required to explain the additional features.

The cost impact of each of the functionality enhancements on the economic waterfall analyses appear to be minimal on a monthly basis. However, our research was unable to identify specific broad-based cost analyses which fully-capture the potential indirect costs and risk exposures that could result in lower pre-tax profit contributions per ETA from the levels estimated in the following pages.

A critical issue is how FIs will act on their perceptions regarding the profit and loss potential of a feature rich ETA. It is likely that the majority of FIs will conclude that the impact on staff costs and risk of cannibalizing currently profitable banking products and services are too great to justify offering ETA products voluntarily on a proactive basis. Rather, the normal pattern of FIs waiting and studying early movers results will probably be the norm. We anticipate that the trigger event for a broad-based adoption of a feature rich ETA by FIs will be when they lose some customers to a competitor. Given that the target population do not currently use FIs, the traditional trigger event – the loss of customers to a competitor – will not be readily detected.

Capturing the trade-offs between additional features and higher costs for banks tends to be more of an intuitive than empirical exercise. However, it is reasonable to conclude that each additional feature will diminish FIs general willingness to participate in the Franchise ETA system. Each feature adds another

## Introduction

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risk and financial exposure for which they do not have an ability to fully foresee, as many members of the target population by definition do not have accounts at FIs. FIs have expressed a concern that the federal benefit recipients who have not designated a financial institution may have, as a group, substantially higher risks and require a disproportionate amount of staff time to service.

The impact of these features on FI competition will differ with respect to an FI's size and scale. We anticipate that the savings and deposit features will have relatively little impact on competitiveness vis a vis size. However, bill payment via ACH does have substantial economic differences. Large scale FI can generate revenues of \$0.09 per transaction from bill payments collected on behalf of their cash management customers (i.e., utilities) while smaller FIs who do not have large cash management and ACH businesses face costs of up to \$0.08 per transaction according to a study conducted by Visa. According to NACHA the costs for large FIs to complete a received debit ACH payment is currently below \$0.02 a transaction.

Our recommendation is that Treasury should focus on, first, winning the support of FIs for the core cash access features of the ETA previously proposed. After the ETA product has firmly taken hold in the marketplace, then the Treasury could encourage FIs to explore and incorporate these product features into their respective ETA offerings. This strategy will permit FIs to gain experience and knowledge about the ETA population and will be better able to determine the appropriate pricing for each of these enhancements.

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In the June 15<sup>th</sup> report, Dove Associates recommended the following ETA product design. The economic waterfalls for these scenarios are summarized on the following page.

<b>Deposits:</b>	Direct deposit of direct federal funds only, via ACH
<b>Cash Access:</b>	Total of any two cash access opportunities monthly from any combination of On-us ATM and/or branch visits.  Unlimited On-line debit POS purchases with cashback, in accordance with merchant policy
<b>Information Access:</b>	Total of any two information access opportunities from any combination of ATM and/or branch visits to obtain account balances  Monthly statement mailed to ETA accountholders
<b>Cost:</b>	No minimum balance; No interest paid (FI earns float)  \$3.00 monthly fee cap for 'minimum requirements' services  \$1.00 fee cap on each incremental ATM and/or teller visit for either cash withdrawal or balance inquiry
<b>Debit Card Issuance:</b>	Same graphics standards and BINs as offered to other customers  Reg. E compliance including disclosure and error resolution procedures  7 x 24 Call Center for notification of lost or stolen cards
<b>Eligibility:</b>	Participating FIs must provide a qualifying ETA to any direct federal benefit recipient who requests one

## Introduction

The table below shows the estimated financial impact for each additional feature in terms of the monthly pre-tax profit contribution per account as modeled for large and small FIs. The Base ETA values are presented for comparative purposes. Based on the waterfall analyses, the two features that could potentially be added without substantially undermining the ‘two-access’ ETA economics are the savings component and the electronic deposits feature. Adding the ACH bill payment feature would adversely affect smaller FIs competitive position.

### Monthly Pre-tax Profit Contribution Sensitivity

#### *Two Monthly Cash Access Opportunities at ATMs or Branches*

<b>Cash Access Mix</b>	<b>Two</b> On-us ATM Cash Withdrawals and <b>Two</b> Balance Inquiries; <b>No</b> Teller Visits	<b>One</b> On-us ATM Cash Withdrawal and <b>One</b> Balance Inquiry; <b>One</b> Teller Visit	<b>No</b> On-us ATM Cash Withdrawals or Balance Inquiries <b>Two</b> Teller Visits
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#### Base ETA as previously presented

Large FI	\$2.08	\$1.22	\$0.36
Small FI	\$1.64	\$0.88	\$0.12

#### Base ETA with 2% Interest Savings

<i>Large FI</i>	\$2.02	\$1.16	\$0.30
<i>Small FI</i>	\$1.58	\$0.82	\$0.06

#### Base ETA with ACH Bill Payments

<i>Large FI</i>	\$1.43	\$0.57	(\$0.29)
<i>Small FI</i>	\$0.73	(\$0.29)	(\$0.79)

#### Base ETA with Electronic Deposits

<i>Large FI</i>	\$2.19	\$1.32	\$0.46
<i>Small FI</i>	\$1.70	\$0.94	\$0.18

- Pre-tax profit contributions are based on estimated recurring revenues and costs. It excludes program start-up, account set-up, closure and reclamation costs.

## Savings Feature

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The savings feature would expand both the utility of the ETA and the costs of servicing the customer. The added costs for the FI will include compliance with Truth-in-Savings regulations and income tax reporting requirements (i.e., 1099's).

One positive benefit is that it may encourage accountholders to maintain larger balances than they would otherwise. This should increase the float income due to the higher balances. However, it is anticipated that interest would need to be paid to incent ETA accountholders to maintain a balance in the account. The economic waterfall assumed that a 2% interest rate, comparable to passbook rates, would be paid on the accounts average daily balance. Float and balance estimates assume that accountholders would maintain 10% of the average benefit amount at the end of the month. As modeled, the increased daily balances and lower net interest income effectively cancel each other out -- resulting in slight reduction in float income for an FI. The DPC experience in Texas suggests that the 10% savings level assumption may be on the high side, hence both float income and interest expenses may be overstated.

An important benefit of higher balances would be in the situation where ACH bill payment feature is being considered. Even a \$65 savings balance may provide an important cushion to reduce the frequency of ACH exceptions and rejections due to insufficient funds in the ETA account. Fewer exceptions will benefit the accountholder and reduce costs for the FI.

The cost impact of a savings feature is a constant of approximately \$0.06 per account per month for both large and small FIs. Of the three additional features considered, the savings feature is the one which will have the least impact on FI costs. Adding this feature is unlikely to significantly diminish an FIs willingness to participate in the ETA program.

### Key Assumptions:

- Average monthly benefit amount is \$654.91. Assuming that 10% of this amount is held as savings through the end of each month, the beginning balance will increase to approximately \$720.40.
- Interest rate will be the same as a Passbook – 2%.
- The cost for a 1099 tax reporting and form distribution \$0.60 per year for an internally generated 1099 form.
- The incremental cost of complying with Truth-in-Savings disclosures will cost \$0.25 based on the study “ The Cost of Implementing Consumer Financial Regulations: An Analysis of Experience with the Truth in Savings Act” by Gregory Elliehausen and Barbara R. Lowrey, Board of Governors of the Federal Reserve System.

# Savings Feature

## Large FI Waterfall

### ETA - DOVE (0 Teller Visits, 2 ATM Txns)

Franchise - Large FI - Savings Account Feature

	Per Unit	Monthly Quantity	Monthly Cost	Total
<b>ETA Monthly Revenue</b>				
Monthly Account Fee	\$ 3.00	1	\$ 3.000	
POS Income	\$ 0.022	4	\$ 0.088	
Float (Minimum)	\$ 654.91		\$ 0.648	
<b>Sub-total</b>				<b>\$ 3.736</b>
<b>Customer Service</b>				
Teller Visit	\$ 1.15	0	\$ -	
Reg E statements	\$ 0.50	1	\$ 0.500	
Sav Tax form 1099 report	\$ 0.60	0.083	\$ 0.050	
Lost and stolen call center	\$ 10.00	1%	\$ 0.100	
<b>Sub-total</b>				<b>\$ 0.650</b>
<b>Transaction Processing</b>				
Tandem DP Processing per Txn (2 W/D + 2 BI + 4 POS)	\$ 0.0481	8	\$ 0.385	
CAS account maintenance per month	\$ 0.0175	1	\$ 0.018	
<b>Sub-total</b>				<b>\$ 0.402</b>
<b>ATM Expenses</b>				
Withdrawals	\$ 0.108	2	\$ 0.216	
Balance Inquiries	\$ 0.083	2	\$ 0.166	
<b>Sub-total</b>				<b>\$ 0.382</b>
<b>Interest Expense</b>				
Sav Passbook interest rate of 2% per year			\$ 0.28	<b>\$ 0.279</b>
<b>Total recurring monthly costs for FI</b>				<b>\$ 1.713</b>
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<b>Pre-tax Profit Contribution</b>				<b>\$ 2.023</b>
<b>Account Set-up Expenses</b>				
Account Origination Expenses	\$ 11.00	1	\$ 11.000	
Card Issuance	\$ 1.61	1	\$ 1.610	
Sav Reg DD disclosure	\$ 0.25	1	\$ 0.250	
<b>Sub-total</b>				<b>\$ 12.86</b>
<b>Government Contribution to Set-Up Expenses</b>	0%			<b>\$ -</b>
<b>Set-Up Expenses for Financial Institution</b>				<b>\$ 12.86</b>
<b>Months to Recover Set-Up Expenses</b>				<b>months: 6.4</b>
<b>7 yr NPV @ 15% (Hurdle rate)</b>				<b>\$91.96</b>

# Savings Feature

## Large FI Waterfall

### ETA - DOVE (1 Teller Visit, 1 ATM Tx)

Franchise - Large FI - Savings Account Feature

	Per Unit	Monthly Quantity	Monthly Cost	Total
<b>ETA Monthly Revenue</b>				
Monthly Account Fee	\$ 3.00	1	\$ 3.000	
POS Income	\$ 0.022	4	\$ 0.088	
Float (Minimum)	\$ 654.91		\$ 0.648	
<b>Sub-total</b>				<b>\$ 3.736</b>
<b>Customer Service</b>				
Teller Visit	\$ 1.15	1	\$ 1.150	
Reg E statements	\$ 0.50	1	\$ 0.500	
Sav Tax form 1099 report	\$ 0.60	0.083	\$ 0.050	
Lost and stolen call center	\$ 10.00	1%	\$ 0.100	
<b>Sub-total</b>				<b>\$ 1.800</b>
<b>Transaction Processing</b>				
Tandem DP Processing per Txn (1W/D + 1 BI + 4 POS)	\$ 0.0481	6	\$ 0.289	
CAS account maintenance per month	\$ 0.0175	1	\$ 0.018	
<b>Sub-total</b>				<b>\$ 0.306</b>
<b>ATM Expenses</b>				
Withdrawals	\$ 0.108	1	\$ 0.108	
Balance Inquiries	\$ 0.083	1	\$ 0.083	
<b>Sub-total</b>				<b>\$ 0.191</b>
<b>Interest Expense</b>				
Sav Passbook interest rate of 2% per year			\$ 0.28	<b>\$ 0.279</b>
<b>Total recurring monthly costs for FI</b>				<b>\$ 2.576</b>
				-----
<b>Pre-tax Profit Contribution</b>				<b>\$ 1.160</b>
<b>Account Set-up Expenses</b>				
Account Origination Expenses	\$ 11.00	1	\$ 11.000	
Card Issuance	\$ 1.61	1	\$ 1.610	
Sav Reg DD disclosure	\$ 0.25	1	\$ 0.250	
<b>Sub-total</b>				<b>\$ 12.86</b>
<b>Government Contribution to Set-Up Expenses</b>	0%			<b>\$ -</b>
<b>Set-Up Expenses for Financial Institution</b>				<b>\$ 12.86</b>
<b>Months to Recover Set-Up Expenses</b>				<b>months: 11.1</b>
<b>7 yr NPV @ 15% (Hurdle rate)</b>				<b>\$47.25</b>



# Savings Feature

## Large FI Waterfall

### ETA - DOVE (2 Teller Visits, 0 ATM Txns)

Franchise - Large FI - Savings Account Feature

	Per Unit	Monthly Quantity	Monthly Cost	Total
<b>ETA Monthly Revenue</b>				
Monthly Account Fee	\$ 3.00	1	\$ 3.000	
POS Income	\$ 0.022	4	\$ 0.088	
Float (Minimum)	\$ 654.91		\$ 0.648	
<b>Sub-total</b>				<b>\$ 3.736</b>
<b>Customer Service</b>				
Teller Visit	\$ 1.15	2	\$ 2.300	
Reg E statements	\$ 0.50	1	\$ 0.500	
Sav Tax form 1099 report	\$ 0.60	0.083	\$ 0.050	
Lost and stolen call center	\$ 10.00	1%	\$ 0.100	
<b>Sub-total</b>				<b>\$ 2.950</b>
<b>Transaction Processing</b>				
Tandem DP Processing per Txn (4 POS)	\$ 0.0481	4	\$ 0.192	
CAS account maintenance per month	\$ 0.0175	1	\$ 0.018	
<b>Sub-total</b>				<b>\$ 0.210</b>
<b>ATM Expenses</b>				
Withdrawals	\$ 0.108	0	\$ -	
Balance Inquiries	\$ 0.083	0	\$ -	
<b>Sub-total</b>				<b>\$ -</b>
<b>Interest Expense</b>				
Sav Passbook interest rate of 2% per year			\$ 0.28	<b>\$ 0.279</b>
<b>Total recurring monthly costs for FI</b>				<b>\$ 3.439</b>
<b>Pre-tax Profit Contribution</b>				<b>\$ 0.297</b>
<b>Account Set-up Expenses</b>				
Account Origination Expenses	\$ 11.00	1	\$ 11.000	
Card Issuance	\$ 1.61	1	\$ 1.610	
Sav Reg DD disclosure	\$ 0.25	1	\$ 0.250	
<b>Sub-total</b>				<b>\$ 12.86</b>
<b>Government Contribution to Set-Up Expenses</b>	0%			<b>\$ -</b>
<b>Set-Up Expenses for Financial Institution</b>				<b>\$ 12.86</b>
<b>Months to Recover Set-Up Expenses</b>			<b>months:</b>	<b>43.3</b>
<b>7 yr NPV @ 15% (Hurdle rate)</b>				<b>\$2.54</b>

# Savings Feature

## Small FI Waterfall

### ETA - DOVE (0 Teller Visits, 2 ATM Txns)

Franchise - Small FI - Savings Account Feature

	Per Unit	Monthly Quantity	Monthly Cost	Total
<b>ETA Monthly Revenue</b>				
Monthly Account Fee	\$ 3.00	1	\$ 3.000	
POS Income	\$ 0.022	4	\$ 0.088	
Float (Minimum)	\$ 654.91		\$ 0.648	
<b>Sub-total</b>				<b>\$ 3.736</b>
<b>Customer Service</b>				
Teller Visit	\$ 1.15	0	\$ -	
Reg E statements	\$ 0.50	1	\$ 0.500	
Sav Tax form 1099 report	\$ 0.60	0.083	\$ 0.050	
Lost and stolen call center	\$ 10.00	1%	\$ 0.100	
<b>Sub-total</b>				<b>\$ 0.650</b>
<b>Transaction Processing</b>				
On-us ATM transactions (2 W/D + 2 BI)	\$ 0.1000	4	\$ 0.400	
File hosting per month	\$ 0.0500	1	\$ 0.050	
POS transactions (4 POS)	\$ 0.1000	4	\$ 0.400	
<b>Sub-total</b>				<b>\$ 0.850</b>
<b>ATM Expenses</b>				
Withdrawals	\$ 0.108	2	\$ 0.216	
Balance Inquiries	\$ 0.083	2	\$ 0.166	
<b>Sub-total</b>				<b>\$ 0.382</b>
<b>Interest Expense</b>				
Sav Passbook interest rate of 2% per year			\$ 0.28	<b>\$ 0.279</b>
<b>Total recurring monthly costs for FI</b>				<b>\$ 2.161</b>
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<b>Pre-tax Profit Contribution</b>				<b>\$ 1.575</b>
<b>Account Set-up Expenses</b>				
Account Origination Expenses	\$ 11.00	1	\$ 11.000	
Card Issuance	\$ 1.61	1	\$ 1.610	
Sav Reg DD disclosure	\$ 0.25	1	\$ 0.250	
<b>Sub-total</b>				<b>\$ 12.86</b>
<b>Government Contribution to Set-Up Expenses</b>	0%			<b>\$ -</b>
<b>Set-Up Expenses for Financial Institution</b>				<b>\$ 12.86</b>
<b>Months to Recover Set-Up Expenses</b>			<b>months:</b>	<b>8.2</b>
<b>7 yr NPV @ 15% (Hurdle rate)</b>				<b>\$68.76</b>

# Savings Feature

## Small FI Waterfall

### ETA - DOVE (1 Teller Visit, 1 ATM Tx)

Franchise - Small FI - Savings Account Feature

	Per Unit	Monthly Quantity	Monthly Cost	Total
<b>ETA Monthly Revenue</b>				
Monthly Account Fee	\$ 3.00	1	\$ 3.000	
POS Income	\$ 0.022	4	\$ 0.088	
Float (Minimum)	\$ 654.91		\$ 0.648	
<b>Sub-total</b>				<b>\$ 3.736</b>
<b>Customer Service</b>				
Teller Visit	\$ 1.15	1	\$ 1.150	
Reg E statements	\$ 0.50	1	\$ 0.500	
Sav Tax form 1099 report	\$ 0.60	0.083	\$ 0.050	
Lost and stolen call center	\$ 10.00	1%	\$ 0.100	
<b>Sub-total</b>				<b>\$ 1.800</b>
<b>Transaction Processing</b>				
On-us ATM transactions (1W/D + 1 BI)	\$ 0.1000	2	\$ 0.200	
File hosting per month	\$ 0.0500	1	\$ 0.050	
POS transactions (4 POS)	\$ 0.1000	4	\$ 0.400	
<b>Sub-total</b>				<b>\$ 0.650</b>
<b>ATM Expenses</b>				
Withdrawals	\$ 0.108	1	\$ 0.108	
Balance Inquiries	\$ 0.083	1	\$ 0.083	
<b>Sub-total</b>				<b>\$ 0.191</b>
<b>Interest Expense</b>				
Sav Passbook interest rate of 2% per year			\$ 0.28	<b>\$ 0.279</b>
<b>Total recurring monthly costs for FI</b>				<b>\$ 2.920</b>
				-----
<b>Pre-tax Profit Contribution</b>				<b>\$ 0.816</b>
<b>Account Set-up Expenses</b>				
Account Origination Expenses	\$ 11.00	1	\$ 11.000	
Card Issuance	\$ 1.61	1	\$ 1.610	
Sav Reg DD disclosure	\$ 0.25	1	\$ 0.250	
<b>Sub-total</b>				<b>\$ 12.86</b>
<b>Government Contribution to Set-Up Expenses</b>	0%			<b>\$ -</b>
<b>Set-Up Expenses for Financial Institution</b>				<b>\$ 12.86</b>
<b>Months to Recover Set-Up Expenses</b>				<b>months: 15.8</b>
<b>7 yr NPV @ 15% (Hurdle rate)</b>				<b>\$29.43</b>

# Savings Feature

## Small FI Waterfall

### ETA - DOVE (2 Teller Visits, 0 ATM TxS)

Franchise - Small FI - Savings Account Feature

	Per Unit	Monthly Quantity	Monthly Cost	Total
<b>ETA Monthly Revenue</b>				
Monthly Account Fee	\$ 3.00	1	\$ 3.000	
POS Income	\$ 0.022	4	\$ 0.088	
Float (Minimum)	\$ 654.91		\$ 0.648	
<b>Sub-total</b>				<b>\$ 3.736</b>
<b>Customer Service</b>				
Teller Visit	\$ 1.15	2	\$ 2.300	
Reg E statements	\$ 0.50	1	\$ 0.500	
Sav Tax form 1099 report	\$ 0.60	0.083	\$ 0.050	
Lost and stolen call center	\$ 10.00	1%	\$ 0.100	
<b>Sub-total</b>				<b>\$ 2.950</b>
<b>Transaction Processing</b>				
On-us ATM transactions	\$ 0.1000	0	\$ -	
File hosting per month	\$ 0.0500	1	\$ 0.050	
POS transactions (4 POS)	\$ 0.1000	4	\$ 0.400	
<b>Sub-total</b>				<b>\$ 0.450</b>
<b>ATM Expenses</b>				
Withdrawals	\$ 0.108	0	\$ -	
Balance Inquiries	\$ 0.083	0	\$ -	
<b>Sub-total</b>				<b>\$ -</b>
<b>Interest Expense</b>				
Sav Passbook interest rate of 2% per year			\$ 0.28	<b>\$ 0.279</b>
<b>Total recurring monthly costs for FI</b>				<b>\$ 3.679</b>
<b>Pre-tax Profit Contribution</b>				<b>\$ 0.057</b>
<b>Account Set-up Expenses</b>				
Account Origination Expenses	\$ 11.00	1	\$ 11.000	
Card Issuance	\$ 1.61	1	\$ 1.610	
Sav Reg DD disclosure	\$ 0.25	1	\$ 0.250	
<b>Sub-total</b>				<b>\$ 12.86</b>
<b>Government Contribution to Set-Up Expenses</b>	0%			<b>\$ -</b>
<b>Set-Up Expenses for Financial Institution</b>				<b>\$ 12.86</b>
<b>Months to Recover Set-Up Expenses</b>			<b>months:</b>	<b>NMF</b>
<b>7 yr NPV @ 15% (Hurdle rate)</b>				<b>(\$9.91)</b>

## Savings Feature

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### Float and Interest Payment Estimation

Day	from FMS	% Withdrawn	Cum %	Float %	Float Balance	4.75%	2.00%
0	\$ 720.40						
0.151541	\$ -	0.00%	0.00%	100.00%	\$ 720.40	\$ 0.094	\$ 0.039
1	\$ 436.56	60.6%	60.60%	39.40%	\$ 283.84	\$ 0.037	\$ 0.016
2	\$ -	0.00%	60.60%	39.40%	\$ 283.84	\$ 0.037	\$ 0.016
3	\$ -	0.00%	60.60%	39.40%	\$ 283.84	\$ 0.037	\$ 0.016
4	\$ -	0.00%	60.60%	39.40%	\$ 283.84	\$ 0.037	\$ 0.016
5	\$ -	0.00%	60.60%	39.40%	\$ 283.84	\$ 0.037	\$ 0.016
6	\$ -	0.00%	60.60%	39.40%	\$ 283.84	\$ 0.037	\$ 0.016
7	\$ -	0.00%	60.60%	39.40%	\$ 283.84	\$ 0.037	\$ 0.016
8	\$ 109.17	15.15%	75.75%	24.25%	\$ 174.67	\$ 0.023	\$ 0.010
9	\$ -	0.00%	75.75%	24.25%	\$ 174.67	\$ 0.023	\$ 0.010
10	\$ -	0.00%	75.75%	24.25%	\$ 174.67	\$ 0.023	\$ 0.010
11	\$ -	0.00%	75.75%	24.25%	\$ 174.67	\$ 0.023	\$ 0.010
12	\$ -	0.00%	75.75%	24.25%	\$ 174.67	\$ 0.023	\$ 0.010
13	\$ -	0.00%	75.75%	24.25%	\$ 174.67	\$ 0.023	\$ 0.010
14	\$ -	0.00%	75.75%	24.25%	\$ 174.67	\$ 0.023	\$ 0.010
15	\$ 109.18	15.16%	90.91%	9.09%	\$ 174.67	\$ 0.009	\$ 0.010
16	\$ -	0.00%	90.91%	9.09%	\$ 65.49	\$ 0.009	\$ 0.004
17	\$ -	0.00%	90.91%	9.09%	\$ 65.49	\$ 0.009	\$ 0.004
18	\$ -	0.00%	90.91%	9.09%	\$ 65.49	\$ 0.009	\$ 0.004
19	\$ -	0.00%	90.91%	9.09%	\$ 65.49	\$ 0.009	\$ 0.004
20	\$ -	0.00%	90.91%	9.09%	\$ 65.49	\$ 0.009	\$ 0.004
21	\$ -	0.00%	90.91%	9.09%	\$ 65.49	\$ 0.009	\$ 0.004
22	\$ -	0.00%	90.91%	9.09%	\$ 65.49	\$ 0.009	\$ 0.004
23	\$ -	0.00%	90.91%	9.09%	\$ 65.49	\$ 0.009	\$ 0.004
24	\$ -	0.00%	90.91%	9.09%	\$ 65.49	\$ 0.009	\$ 0.004
25	\$ -	0.00%	90.91%	9.09%	\$ 65.49	\$ 0.009	\$ 0.004
26	\$ -	0.00%	90.91%	9.09%	\$ 65.49	\$ 0.009	\$ 0.004
27	\$ -	0.00%	90.91%	9.09%	\$ 65.49	\$ 0.009	\$ 0.004
28	\$ -	0.00%	90.91%	9.09%	\$ 65.49	\$ 0.009	\$ 0.004
29	\$ -	0.00%	90.91%	9.09%	\$ 65.49	\$ 0.009	\$ 0.004
30	\$ -	0.00%	90.91%	9.09%	\$ 65.49	\$ 0.009	\$ 0.004
						\$ 0.648	\$ 0.279

## ACH Bill Payment Feature

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The bill payment feature changes the basic notion of the ETA as a low-cost cash access product to a low-cost payment product. The economic waterfall assumes that each ETA accountholder uses this feature. However, a recent study by the FRB indicates that approximately only 37% of households use ACH payments<sup>1</sup>. The most important challenge of providing this additional feature is that it combines the real-time balances of the ATM systems with the batch processing of the ACH system. Consequently the balance of available funds that an ETA cardholder obtains from an ATM will not be correct on the days that ACH payments are made. It is not unusual for 8 to 12% of an FI's DDA customers to experience an NSF condition each year. These situations will add more complexity and costs to the ETA. Another consideration is the competitive impact that ACH bill payment will have. ACH bill payment is a relatively concentrated business with the largest FI generating revenue and enjoying lower unit costs. If this is a required feature, then many of the smaller FIs will not be competitive with larger FIs.

ACH bill payment waterfall suggest that adding ACH bill payment will reduce the monthly pre-tax contribution per month per account by approximately \$0.60 for large FIs and by about \$0.90 for small FIs.

### Key assumptions:

- Approximately 2.2% of ACH received debits are rejected and need to be treated as exceptions (NACHA). The cost of handling exceptions for FIs typically exceed \$2.00. The model assumes a cost of \$2.34 for handling each exception.
- The large FI case includes \$0.09 of revenue from bill payment and lower costs per transaction. The small FI case does not provide any income.
- The top five ACH bill payment organizations handle approximately 76% of the consumer initiated electronic bill payment volume<sup>2</sup>. The investment and scale required to succeed in this service eliminates for most FIs the opportunity to generate fees from billers. Generally these FIs charge billers a fee in the range of \$0.08 to \$0.09 per ACH debit. Other FIs costs include ACH fees, internal data processing, administration and research for customer support and financial losses.
- Float is assumed to be \$0.38 per month as it had been used in the previous models.

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<sup>1</sup> Source: in-depth market research on direct deposit and direct payment conducted by the Federal Reserve System in 1997-1998.

<sup>2</sup> Source: NACHA Bill Payment Council, 1998 benchmarking study

## ACH Bill Payment Feature

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### Service Issues

Combining real-time transaction processing with the ACH system creates opportunities for overdrafts. The potential exists for an ETA holder to have a balance at the ATM that does not show the available funds. This will lead to increased customer service costs. Our estimate is that 2.2% of the payments will result in exceptions. Given the characteristics of ETA prospects, these exceptions will likely result in a branch visit that will require an estimated five minutes of staff labor costing at least \$1.29 (5 minutes at \$15.44 hour) to resolve the customers situation. Additionally, the FI will incur \$1.06 in ACH fees and processing expenses to reconcile each of these exceptions. Our cost estimate is that each exception will cost the FI more than \$2.34.

Another significant expense with payment products is charge-offs. One large FI's experience shows average charge-offs of approximately \$8.88 per year per DDA account. This would equate to approximately \$0.74 per month. Most of these situations occur when the accountholder does not know what his/her balance is at the time he/she authorizes a non-real-time payment.

Third-party bill payment creates a number of policy questions which must be resolved. One of the most challenging issues will be articulating what recourse an FI will have to collect the expenses and prevent future occurrences. Will an FI be allowed to discontinue ACH debits? Can the FI charge a fee in the \$10 to \$20 range to discourage recipients who do this frequently? Can they charge a fee to recover their staff time's costs and expenses incurred? Can they close the account?

# ACH Bill Payment Feature

## Large FI Waterfall

### ETA - DOVE (0 Teller Visits, 2 ATM Txns)

Franchise - Large FI - Bill Payment Feature

	Per Unit	Monthly Quantity	Monthly Cost	Total
<b>ETA Monthly Revenue</b>				
Monthly Account Fee	\$ 3.00	1	\$ 3.000	
POS Income	\$ 0.022	4	\$ 0.088	
Float (Minimum)	\$ 654.91		\$ 0.380	
<i>Bil</i> Bill Payment Revenue	\$ 0.09	2	\$ 0.180	
<b>Sub-total</b>				<b>\$ 3.648</b>
<b>Customer Service</b>				
Teller Visit	\$ 1.15	0	\$ -	
Reg E statements	\$ 0.50	1	\$ 0.500	
Lost and stolen call center	\$ 10.00	1%	\$ 0.100	
Bill Payment Exception Support	\$ 1.29	2.2%	\$ 0.028	
<b>Sub-total</b>				<b>\$ 0.628</b>
<b>Transaction Processing</b>				
Tandem DP Processing per Txn (2 W/D + 2 BI + 4 POS)	\$ 0.0481	8	\$ 0.385	
CAS account maintenance per month	\$ 0.0175	1	\$ 0.018	
<i>Bil</i> ACH Debit Bill Payment	\$ 0.0200	2	\$ 0.040	
<i>Bil</i> ACH Debit Bill Payment Exception @ 2.2% Txns	\$ 1.0570	2.20%	\$ 0.023	
<b>Sub-total</b>				<b>\$ 0.466</b>
<b>ATM Expenses</b>				
Withdrawals	\$ 0.108	2	\$ 0.216	
Balance Inquiries	\$ 0.083	2	\$ 0.166	
<b>Sub-total</b>				<b>\$ 0.382</b>
<b>Other Expenses</b>				
<i>Bil</i> Charge Offs	\$ 0.740	1	\$ 0.740	<b>\$ 0.740</b>
<b>Total recurring monthly costs for FI</b>				<b>\$ 2.216</b>
				-----
<b>Pre-tax Profit Contribution</b>				<b>\$ 1.432</b>
<b>Account Set-up Expenses</b>				
Account Origination Expenses	\$ 11.00	1	\$ 11.000	
Card Issuance	\$ 1.61	1	\$ 1.610	
<i>Bil</i> Pre-authorized Debit Set-up	\$ 2.00	1	\$ 2.000	
<b>Sub-total</b>				<b>\$ 14.61</b>
<b>Government Contribution to Set-Up Expenses</b>	0%			<b>\$ -</b>
<b>Set-Up Expenses for Financial Institution</b>				<b>\$ 14.61</b>
<b>Months to Recover Set-Up Expenses</b>				<b>months: 10.2</b>
<b>7 yr NPV @ 15% (Hurdle rate)</b>				<b>\$59.61</b>



# ACH Bill Payment Feature

## Large FI Waterfall

### ETA - DOVE (1 Teller Visit, 1 ATM Tx)

Franchise - Large FI - Bill Payment Feature

	Per Unit	Monthly Quantity	Monthly Cost	Total
<b>ETA Monthly Revenue</b>				
Monthly Account Fee	\$ 3.00	1	\$ 3.000	
POS Income	\$ 0.022	4	\$ 0.088	
Float (Minimum)	\$ 654.91		\$ 0.380	
<i>Bil</i> Bill Payment Revenue	\$ 0.09	2	\$ 0.180	
<b>Sub-total</b>				<b>\$ 3.648</b>
<b>Customer Service</b>				
Teller Visit	\$ 1.15	1	\$ 1.150	
Reg E statements	\$ 0.50	1	\$ 0.500	
Lost and stolen call center	\$ 10.00	1%	\$ 0.100	
Bill Payment Exception Support	\$ 1.29	2.2%	\$ 0.028	
<b>Sub-total</b>				<b>\$ 1.778</b>
<b>Transaction Processing</b>				
Tandem DP Processing per Txn (1W/D + 1 BI + 4 POS)	\$ 0.0481	6	\$ 0.289	
CAS account maintenance per month	\$ 0.0175	1	\$ 0.018	
<i>Bil</i> ACH Debit Bill Payment	\$ 0.0200	2	\$ 0.040	
<i>Bil</i> ACH Debit Bill Payment Exception @ 2.2% Tx	\$ 1.0570	2.20%	\$ 0.023	
<b>Sub-total</b>				<b>\$ 0.369</b>
<b>ATM Expenses</b>				
Withdrawals	\$ 0.108	1	\$ 0.108	
Balance Inquiries	\$ 0.083	1	\$ 0.083	
<b>Sub-total</b>				<b>\$ 0.191</b>
<b>Other Expenses</b>				
<i>Bil</i> Charge Offs	\$ 0.740	1	\$ 0.740	<b>\$ 0.740</b>
<b>Total recurring monthly costs for FI</b>				<b>\$ 3.079</b>
<b>Pre-tax Profit Contribution</b>				<b>\$ 0.569</b>
<b>Account Set-up Expenses</b>				
Account Origination Expenses	\$ 11.00	1	\$ 11.000	
Card Issuance	\$ 1.61	1	\$ 1.610	
<i>Bil</i> Pre-authorized Debit Set-up	\$ 2.00	1	\$ 2.000	
<b>Sub-total</b>				<b>\$ 14.61</b>
<b>Government Contribution to Set-Up Expenses</b>	0%			<b>\$ -</b>
<b>Set-Up Expenses for Financial Institution</b>				<b>\$ 14.61</b>
<b>Months to Recover Set-Up Expenses</b>				<b>months: 25.7</b>
<b>7 yr NPV @ 15% (Hurdle rate)</b>				<b>\$14.89</b>

# ACH Bill Payment Feature

## Large FI Waterfall

### ETA - DOVE (2 Teller Visits, 0 ATM Txns)

Franchise - Large FI - Bill Payment Feature

	Per Unit	Monthly Quantity	Monthly Cost	Total
<b>ETA Monthly Revenue</b>				
Monthly Account Fee	\$ 3.00	1	\$ 3.000	
POS Income	\$ 0.022	4	\$ 0.088	
Float (Minimum)	\$ 654.91		\$ 0.380	
<i>Bil</i> Bill Payment Revenue	\$ 0.09	2	\$ 0.180	
<b>Sub-total</b>				<b>\$ 3.648</b>
<b>Customer Service</b>				
Teller Visit	\$ 1.15	2	\$ 2.300	
Reg E statements	\$ 0.50	1	\$ 0.500	
Lost and stolen call center	\$ 10.00	1%	\$ 0.100	
Bill Payment Exception Support	\$ 1.29	2.2%	\$ 0.028	
<b>Sub-total</b>				<b>\$ 2.928</b>
<b>Transaction Processing</b>				
Tandem DP Processing per Txn (4 POS)	\$ 0.0481	4	\$ 0.192	
CAS account maintenance per month	\$ 0.0175	1	\$ 0.018	
<i>Bil</i> ACH Debit Bill Payment	\$ 0.0200	2	\$ 0.040	
<i>Bil</i> ACH Debit Bill Payment Exception @ 2.2% Txns	\$ 1.0570	2.20%	\$ 0.023	
<b>Sub-total</b>				<b>\$ 0.273</b>
<b>ATM Expenses</b>				
Withdrawals	\$ 0.108	0	\$ -	
Balance Inquiries	\$ 0.083	0	\$ -	
<b>Sub-total</b>				<b>\$ -</b>
<b>Other Expenses</b>				
<i>Bil</i> Charge Offs	\$ 0.740	1	\$ 0.740	<b>\$ 0.740</b>
<b>Total recurring monthly costs for FI</b>				<b>\$ 3.941</b>
<b>Pre-tax Profit Contribution</b>				<b>\$ (0.293)</b>
<b>Account Set-up Expenses</b>				
Account Origination Expenses	\$ 11.00	1	\$ 11.000	
Card Issuance	\$ 1.61	1	\$ 1.610	
<i>Bil</i> Pre-authorized Debit Set-up	\$ 2.00	1	\$ 2.000	
<b>Sub-total</b>				<b>\$ 14.61</b>
<b>Government Contribution to Set-Up Expenses</b>	0%			<b>\$ -</b>
<b>Set-Up Expenses for Financial Institution</b>				<b>\$ 14.61</b>
<b>Months to Recover Set-Up Expenses</b>			<b>months:</b>	<b>NMF</b>
<b>7 yr NPV @ 15% (Hurdle rate)</b>				<b>(\$29.82)</b>

# ACH Bill Payment Feature

## Small FI Waterfall

### ETA - DOVE (0 Teller Visits, 2 ATM Txns)

Franchise - Small FI - Bill Payment Feature

	Per Unit	Monthly Quantity	Monthly Cost	Total
<b>ETA Monthly Revenue</b>				
Monthly Account Fee	\$ 3.00	1	\$ 3.000	
POS Income	\$ 0.022	4	\$ 0.088	
Float (Minimum)	\$ 654.91		\$ 0.380	
<i>Bill</i> Bill Payment Revenue	\$ -	2	\$ -	
<b>Sub-total</b>				<b>\$ 3.468</b>
<b>Customer Service</b>				
Teller Visit	\$ 1.15	0	\$ -	
Reg E statements	\$ 0.50	1	\$ 0.500	
Lost and stolen call center	\$ 10.00	1%	\$ 0.100	
Bill Payment Exception Support	\$ 1.29	2.2%	\$ 0.028	
<b>Sub-total</b>				<b>\$ 0.628</b>
<b>Transaction Processing</b>				
On-us ATM transactions (2 W/D + 2 BI)	\$ 0.1000	4	\$ 0.400	
File hosting per month	\$ 0.0500	1	\$ 0.050	
POS transactions (4 POS)	\$ 0.1000	4	\$ 0.400	
<i>Bill</i> ACH Debit Bill Payment	\$ 0.0570	2	\$ 0.114	
<i>Bill</i> ACH Debit Bill Payment Exception @ 2.2% Txns	\$ 1.0570	2.20%	\$ 0.023	
<b>Sub-total</b>				<b>\$ 0.987</b>
<b>ATM Expenses</b>				
Withdrawals	\$ 0.108	2	\$ 0.216	
Balance Inquiries	\$ 0.083	2	\$ 0.166	
<b>Sub-total</b>				<b>\$ 0.382</b>
<b>Other Expenses</b>				
<i>Bill</i> Charge Offs	\$ 0.740	1	\$ 0.740	<b>\$ 0.740</b>
<b>Total recurring monthly costs for FI</b>				<b>\$ 2.738</b>
				-----
<b>Pre-tax Profit Contribution</b>				<b>\$ 0.730</b>
<b>Account Set-up Expenses</b>				
Account Origination Expenses	\$ 11.00	1	\$ 11.000	
Card Issuance	\$ 1.61	1	\$ 1.610	
<i>Bill</i> Pre-authorized Debit Set-up	\$ 2.00	1	\$ 2.000	
<b>Sub-total</b>				<b>\$ 14.61</b>
<b>Government Contribution to Set-Up Expenses</b>				0% <b>\$ -</b>
<b>Set-Up Expenses for Financial Institution</b>				<b>\$ 14.61</b>
<b>Months to Recover Set-Up Expenses</b>				<b>months: 20.0</b>
<b>7 yr NPV @ 15% (Hurdle rate)</b>				<b>\$23.24</b>

# ACH Bill Payment Feature

## Small FI Waterfall

### ETA - DOVE (1 Teller Visit, 1 ATM Tx)

Franchise - Small FI - Bill Payment Feature

	Per Unit	Monthly Quantity	Monthly Cost	Total
<b>ETA Monthly Revenue</b>				
Monthly Account Fee	\$ 3.00	1	\$ 3.000	
POS Income	\$ 0.022	4	\$ 0.088	
Float (Minimum)	\$ 654.91		\$ 0.380	
<i>Bill</i> Bill Payment Revenue	\$ -	2	\$ -	
<b>Sub-total</b>				<b>\$ 3.468</b>
<b>Customer Service</b>				
Teller Visit	\$ 1.15	1	\$ 1.150	
Reg E statements	\$ 0.50	1	\$ 0.500	
Lost and stolen call center	\$ 10.00	1%	\$ 0.100	
Bill Payment Exception Support	\$ 1.29	2.2%	\$ 0.028	
<b>Sub-total</b>				<b>\$ 1.778</b>
<b>Transaction Processing</b>				
On-us ATM transactions (1W/D + 1 BI)	\$ 0.1000	2	\$ 0.200	
File hosting per month	\$ 0.0500	1	\$ 0.050	
POS transactions (4 POS)	\$ 0.1000	4	\$ 0.400	
<i>Bill</i> ACH Debit Bill Payment	\$ 0.0570	2	\$ 0.114	
<i>Bill</i> ACH Debit Bill Payment Exception @ 2.2% Tx	\$ 1.0570	2.20%	\$ 0.023	
<b>Sub-total</b>				<b>\$ 0.787</b>
<b>ATM Expenses</b>				
Withdrawals	\$ 0.108	1	\$ 0.108	
Balance Inquiries	\$ 0.083	1	\$ 0.083	
<b>Sub-total</b>				<b>\$ 0.191</b>
<b>Other Expenses</b>				
<i>Bill</i> Charge Offs	\$ 0.740	1	\$ 0.740	<b>\$ 0.740</b>
<b>Total recurring monthly costs for FI</b>				<b>\$ 3.497</b>
				-----
<b>Pre-tax Profit Contribution</b>				<b>\$ (0.029)</b>
<b>Account Set-up Expenses</b>				
Account Origination Expenses	\$ 11.00	1	\$ 11.000	
Card Issuance	\$ 1.61	1	\$ 1.610	
<i>Bill</i> Pre-authorized Debit Set-up	\$ 2.00	1	\$ 2.000	
<b>Sub-total</b>				<b>\$ 14.61</b>
<b>Government Contribution to Set-Up Expenses</b>				0% <b>\$ -</b>
<b>Set-Up Expenses for Financial Institution</b>				<b>\$ 14.61</b>
<b>Months to Recover Set-Up Expenses</b>				<b>months: (510.2)</b>
<b>7 yr NPV @ 15% (Hurdle rate)</b>				<b>(\$16.09)</b>

# ACH Bill Payment Feature

## Small FI Waterfall

### ETA - DOVE (2 Teller Visits, 0 ATM TxS)

Franchise - Small FI - Bill Payment Feature

	Per Unit	Monthly Quantity	Monthly Cost	Total
<b>ETA Monthly Revenue</b>				
Monthly Account Fee	\$ 3.00	1	\$ 3.000	
POS Income	\$ 0.022	4	\$ 0.088	
Float (Minimum)	\$ 654.91		\$ 0.380	
<i>Bil</i> Bill Payment Revenue	\$ -	2	\$ -	
<b>Sub-total</b>				<b>\$ 3.468</b>
<b>Customer Service</b>				
Teller Visit	\$ 1.15	2	\$ 2.300	
Reg E statements	\$ 0.50	1	\$ 0.500	
Lost and stolen call center	\$ 10.00	1%	\$ 0.100	
Bill Payment Exception Support	\$ 1.29	2.2%	\$ 0.028	
<b>Sub-total</b>				<b>\$ 2.928</b>
<b>Transaction Processing</b>				
On-us ATM transactions	\$ 0.1000	0	\$ -	
File hosting per month	\$ 0.0500	1	\$ 0.050	
POS transactions (4 POS)	\$ 0.1000	4	\$ 0.400	
<i>Bil</i> ACH Debit Bill Payment	\$ 0.0570	2	\$ 0.114	
<i>Bil</i> ACH Debit Bill Payment Exception @ 2.2% TxS	\$ 1.0570	2.20%	\$ 0.023	
<b>Sub-total</b>				<b>\$ 0.587</b>
<b>ATM Expenses</b>				
Withdrawals	\$ 0.108	0	\$ -	
Balance Inquiries	\$ 0.083	0	\$ -	
<b>Sub-total</b>				<b>\$ -</b>
<b>Other Expenses</b>				
<i>Bil</i> Charge Offs	\$ 0.740	1	\$ 0.740	<b>\$ 0.740</b>
<b>Total recurring monthly costs for FI</b>				<b>\$ 4.256</b>
				-----
<b>Pre-tax Profit Contribution</b>				<b>\$ (0.788)</b>
<b>Account Set-up Expenses</b>				
Account Origination Expenses	\$ 11.00	1	\$ 11.000	
Card Issuance	\$ 1.61	1	\$ 1.610	
<i>Bil</i> Pre-authorized Debit Set-up	\$ 2.00	1	\$ 2.000	
<b>Sub-total</b>				<b>\$ 14.61</b>
<b>Government Contribution to Set-Up Expenses</b>				0% <b>\$ -</b>
<b>Set-Up Expenses for Financial Institution</b>				<b>\$ 14.61</b>
<b>Months to Recover Set-Up Expenses</b>				<b>months: NMF</b>
<b>7 yr NPV @ 15% (Hurdle rate)</b>				<b>(\$55.43)</b>

## Additional Direct Deposits

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Accepting additional direct deposits should increase the pre-tax profit contribution of ETA accounts by approximately \$0.10 per account per month for large FIs; \$0.06 per month for small FIs. Please recognize that we could not identify any statistics on the frequency or average costs incurred by an FI for staff time and legal expenses for these situations. Although it may be a very small number of accounts that could be subject to these concerns, it is a consideration which influence an FIs willingness to offer an ETA.

Key assumptions:

- SSA funds are specifically exempt for set-off and attachment. Other deposits are not. The introduction of additional sources of funds could require an FI to perform extensive documentation of which funds were deposited from which sources and therefore are subject to legal judgments and rulings with respect to bankruptcy, default on loans and IRS notice of levy and demand for payment.

Credit Collections Directory estimated that there will be 1,521,986 personal bankruptcy filings during 1998, implying a rate of approximately 1.5% if we assume that there are approximately 100MM households in the United States.

One FI was fined \$32,000 for not handling a set-off correctly during a bankruptcy case.

- The float impact of additional funds was estimated by the incremental monthly payments received by target profile recipients. The methodology involved calculating ETA prospects average monthly benefit, applying ETA prospects profile demographic characteristics to national income statistics<sup>3</sup> to estimate ETA prospects income from all sources, and then comparing income amounts to estimate the potential funds that could be deposited in an ETA.

ETA prospects benefit assumed to be equal to the 1997 average monthly payment of \$654.91.

National income for age 55-74 is \$24,680 for male and \$11,540 for female.

ETA prospects population is 41.8% male and 58.2% female

Applying this gender distribution, adjusted income for age 55-74 is \$17,032.

Annual reported income by race and gender are as follows: \$24,949 for white males, \$12,961 for white females, \$16,491 for black males, \$11,772 for black females, \$15,437 for hispanic males and \$9,484 for hispanic females.

National distribution by race is 85.7% white and 10.1% black, which gives \$17,293 income, assuming remaining are hispanic.

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<sup>3</sup> Median income of persons by selected characteristics, 1996, The Bureau of Census

## Additional Direct Deposits

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ETA prospects distribution by race is 59% white and 27.7% black, which gives \$15,429 income, assuming remaining are hispanic.

National income needs to be adjusted down by 10.8%.

After both gender and race adjustments, estimated annual income would be \$15,193.

National statistics for education levels show that approximately 17% of US population (>25 years old) do not have a high school degree.

Average annual income for persons who do not have a high school degree is \$11,072.

ETA prospects distribution by education levels shows that 52% of ETA prospects do not have a high school degree.

Using the equations:  $[17\% * 11,072 + 83\% * X = 18,160]$  and  $[52\% * 11,072 + 48\% * X = Y]$ , Y leading to the calculation of the adjustment factor.

Applying the 52/48 educational distribution would adjust income down by 16.5%.

**After gender, race and education adjustments, ETA prospects median income would be \$12,686 per year or \$1,057 per month.**

- The average potential additional income amount is estimated as follows:

Estimated Average Monthly Income	\$1,057.00
Current Average Monthly Payment	\$654.91
Potential Funds available for deposit	\$402.09
<b>Potential Deposits if 50% of potential funds available for deposit are deposited electronically into the ETA</b>	<b>\$201.05</b>

## Additional Direct Deposits

### Large FI Waterfall

#### ETA - DOVE (0 Teller Visits, 2 ATM Txns)

Franchise - Large FI - Direct Deposit Feature

	Per Unit	Monthly Quantity	Monthly Cost	Total
<b>ETA Monthly Revenue</b>				
Monthly Account Fee	\$ 3.00	1	\$ 3.000	
POS Income	\$ 0.022	4	\$ 0.088	
Float (Minimum)	\$ 654.91		\$ 0.501	
<b>Sub-total</b>				<b>\$ 3.589</b>
<b>Customer Service</b>				
Teller Visit	\$ 1.15	0	\$ -	
Reg E statements	\$ 0.50	1	\$ 0.500	
Lost and stolen call center	\$ 10.00	1%	\$ 0.100	
<b>Sub-total</b>				<b>\$ 0.600</b>
<b>Transaction Processing</b>				
Tandem DP Processing per Txn (2 W/D + 2 BI + 4 POS)	\$ 0.0481	8	\$ 0.385	
CAS account maintenance per month	\$ 0.0175	1	\$ 0.018	
Dep Deposit Processing	\$ 0.0200	1	\$ 0.020	
<b>Sub-total</b>				<b>\$ 0.422</b>
<b>ATM Expenses</b>				
Withdrawals	\$ 0.108	2	\$ 0.216	
Balance Inquiries	\$ 0.083	2	\$ 0.166	
<b>Sub-total</b>				<b>\$ 0.382</b>
<b>Total recurring monthly costs for FI</b>				<b>\$ 1.404</b>
				-----
<b>Pre-tax Profit Contribution</b>				<b>\$ 2.185</b>
<b>Account Set-up Expenses</b>				
Account Origination Expenses	\$ 11.00	1	\$ 11.000	
Card Issuance	\$ 1.61	1	\$ 1.610	
<b>Sub-total</b>				<b>\$ 12.61</b>
<b>Government Contribution to Set-Up Expenses</b>	0%			<b>\$ -</b>
<b>Set-Up Expenses for Financial Institution</b>				<b>\$ 12.61</b>
<b>Months to Recover Set-Up Expenses</b>			<b>months:</b>	<b>5.8</b>
<b>7 yr NPV @ 15% (Hurdle rate)</b>				<b>\$100.61</b>



## Additional Direct Deposits

### Large FI Waterfall

#### ETA - DOVE (1 Teller Visit, 1 ATM Tx)

Franchise - Large FI - Direct Deposit Feature

	Per Unit	Monthly Quantity	Monthly Cost	Total
<b>ETA Monthly Revenue</b>				
Monthly Account Fee	\$ 3.00	1	\$ 3.000	
POS Income	\$ 0.022	4	\$ 0.088	
Float (Minimum)	\$ 654.91		\$ 0.501	
<b>Sub-total</b>				<b>\$ 3.589</b>
<b>Customer Service</b>				
Teller Visit	\$ 1.15	1	\$ 1.150	
Reg E statements	\$ 0.50	1	\$ 0.500	
Lost and stolen call center	\$ 10.00	1%	\$ 0.100	
<b>Sub-total</b>				<b>\$ 1.750</b>
<b>Transaction Processing</b>				
Tandem DP Processing per Txn (1W/D + 1 BI + 4 POS)	\$ 0.0481	6	\$ 0.289	
CAS account maintenance per month	\$ 0.0175	1	\$ 0.018	
Dep Deposit Processing	\$ 0.0200	1	\$ 0.020	
<b>Sub-total</b>				<b>\$ 0.326</b>
<b>ATM Expenses</b>				
Withdrawals	\$ 0.108	1	\$ 0.108	
Balance Inquiries	\$ 0.083	1	\$ 0.083	
<b>Sub-total</b>				<b>\$ 0.191</b>
<b>Total recurring monthly costs for FI</b>				<b>\$ 2.267</b>
<b>Pre-tax Profit Contribution</b>				<b>\$ 1.322</b>
<b>Account Set-up Expenses</b>				
Account Origination Expenses	\$ 11.00	1	\$ 11.000	
Card Issuance	\$ 1.61	1	\$ 1.610	
<b>Sub-total</b>				<b>\$ 12.61</b>
<b>Government Contribution to Set-Up Expenses</b>	0%			<b>\$ -</b>
<b>Set-Up Expenses for Financial Institution</b>				<b>\$ 12.61</b>
<b>Months to Recover Set-Up Expenses</b>			<b>months:</b>	<b>9.5</b>
<b>7 yr NPV @ 15% (Hurdle rate)</b>				<b>\$55.89</b>

## Additional Direct Deposits

### Large FI Waterfall

#### ETA - DOVE (2 Teller Visits, 0 ATM Txns)

Franchise - Large FI - Direct Deposit Feature

	Per Unit	Monthly Quantity	Monthly Cost	Total
<b>ETA Monthly Revenue</b>				
Monthly Account Fee	\$ 3.00	1	\$ 3.000	
POS Income	\$ 0.022	4	\$ 0.088	
Float (Minimum)	\$ 654.91		\$ 0.501	
<b>Sub-total</b>				<b>\$ 3.589</b>
<b>Customer Service</b>				
Teller Visit	\$ 1.15	2	\$ 2.300	
Reg E statements	\$ 0.50	1	\$ 0.500	
Lost and stolen call center	\$ 10.00	1%	\$ 0.100	
<b>Sub-total</b>				<b>\$ 2.900</b>
<b>Transaction Processing</b>				
Tandem DP Processing per Txn (4 POS)	\$ 0.0481	4	\$ 0.192	
CAS account maintenance per month	\$ 0.0175	1	\$ 0.018	
Dep Deposit Processing	\$ 0.0200	1	\$ 0.020	
<b>Sub-total</b>				<b>\$ 0.230</b>
<b>ATM Expenses</b>				
Withdrawals	\$ 0.108	0	\$ -	
Balance Inquiries	\$ 0.083	0	\$ -	
<b>Sub-total</b>				<b>\$ -</b>
<b>Total recurring monthly costs for FI</b>				<b>\$ 3.130</b>
<b>Pre-tax Profit Contribution</b>				<b>\$ 0.459</b>
<b>Account Set-up Expenses</b>				
Account Origination Expenses	\$ 11.00	1	\$ 11.000	
Card Issuance	\$ 1.61	1	\$ 1.610	
<b>Sub-total</b>				<b>\$ 12.61</b>
<b>Government Contribution to Set-Up Expenses</b>	0%			<b>\$ -</b>
<b>Set-Up Expenses for Financial Institution</b>				<b>\$ 12.61</b>
<b>Months to Recover Set-Up Expenses</b>			<b>months:</b>	<b>27.5</b>
<b>7 yr NPV @ 15% (Hurdle rate)</b>				<b>\$11.18</b>

## Additional Direct Deposits

### Small FI Waterfall

#### ETA - DOVE (0 Teller Visits, 2 ATM TxS)

Franchise - Small FI - Direct Deposit Feature

	Per Unit	Monthly Quantity	Monthly Cost	Total
<b>ETA Monthly Revenue</b>				
Monthly Account Fee	\$ 3.00	1	\$ 3.000	
POS Income	\$ 0.022	4	\$ 0.088	
Float (Minimum)	\$ 654.91		\$ 0.501	
<b>Sub-total</b>				<b>\$ 3.589</b>
<b>Customer Service</b>				
Teller Visit	\$ 1.15	0	\$ -	
Reg E statements	\$ 0.50	1	\$ 0.500	
Lost and stolen call center	\$ 10.00	1%	\$ 0.100	
<b>Sub-total</b>				<b>\$ 0.600</b>
<b>Transaction Processing</b>				
On-us ATM transactions (2 W/D + 2 BI)	\$ 0.1000	4	\$ 0.400	
File hosting per month	\$ 0.0500	1	\$ 0.050	
POS transactions (4 POS)	\$ 0.1000	4	\$ 0.400	
Dep Deposit Processing	\$ 0.0570	1	\$ 0.057	
<b>Sub-total</b>				<b>\$ 0.907</b>
<b>ATM Expenses</b>				
Withdrawals	\$ 0.108	2	\$ 0.216	
Balance Inquiries	\$ 0.083	2	\$ 0.166	
<b>Sub-total</b>				<b>\$ 0.382</b>
<b>Total recurring monthly costs for FI</b>				<b>\$ 1.889</b>
<b>Pre-tax Profit Contribution</b>				<b>\$ 1.700</b>
<b>Account Set-up Expenses</b>				
Account Origination Expenses	\$ 11.00			
Card Issuance	\$ 1.61			
<b>Sub-total</b>	\$ 12.61			<b>\$ 12.61</b>
<b>Government Contribution to Set-Up Expenses</b>	0%			<b>\$ -</b>
<b>Set-Up Expenses for Financial Institution</b>				<b>\$ 12.61</b>
<b>Months to Recover Set-Up Expenses</b>			<b>months:</b>	<b>7.4</b>
<b>7 yr NPV @ 15% (Hurdle rate)</b>				<b>\$75.49</b>

## Additional Direct Deposits

### Small FI Waterfall

#### ETA - DOVE (1 Teller Visit, 1 ATM Tx)

Franchise - Small FI - Direct Deposit Feature

	Per Unit	Monthly Quantity	Monthly Cost	Total
<b>ETA Monthly Revenue</b>				
Monthly Account Fee	\$ 3.00	1	\$ 3.000	
POS Income	\$ 0.022	4	\$ 0.088	
Float (Minimum)	\$ 654.91		\$ 0.501	
<b>Sub-total</b>				<b>\$ 3.589</b>
<b>Customer Service</b>				
Teller Visit	\$ 1.15	1	\$ 1.150	
Reg E statements	\$ 0.50	1	\$ 0.500	
Lost and stolen call center	\$ 10.00	1%	\$ 0.100	
<b>Sub-total</b>				<b>\$ 1.750</b>
<b>Transaction Processing</b>				
On-us ATM transactions (1W/D + 1 BI)	\$ 0.1000	2	\$ 0.200	
File hosting per month	\$ 0.0500	1	\$ 0.050	
POS transactions (4 POS)	\$ 0.1000	4	\$ 0.400	
Dep Deposit Processing	\$ 0.0570	1	\$ 0.057	
<b>Sub-total</b>				<b>\$ 0.707</b>
<b>ATM Expenses</b>				
Withdrawals	\$ 0.108	1	\$ 0.108	
Balance Inquiries	\$ 0.083	1	\$ 0.083	
<b>Sub-total</b>				<b>\$ 0.191</b>
<b>Total recurring monthly costs for FI</b>				<b>\$ 2.648</b>
<b>Pre-tax Profit Contribution</b>				<b>\$ 0.941</b>
<b>Account Set-up Expenses</b>				
Account Origination Expenses	\$ 11.00			
Card Issuance	\$ 1.61			
<b>Sub-total</b>	\$ 12.61			<b>\$ 12.61</b>
<b>Government Contribution to Set-Up Expenses</b>	0%			<b>\$ -</b>
<b>Set-Up Expenses for Financial Institution</b>				<b>\$ 12.61</b>
<b>Months to Recover Set-Up Expenses</b>			<b>months:</b>	<b>13.4</b>
<b>7 yr NPV @ 15% (Hurdle rate)</b>				<b>\$36.15</b>

## Additional Direct Deposits

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### Small FI Waterfall

#### ETA - DOVE (2 Teller Visits, 0 ATM TxS)

Franchise - Small FI - Direct Deposit Feature

	Per Unit	Monthly Quantity	Monthly Cost	Total
<b>ETA Monthly Revenue</b>				
Monthly Account Fee	\$ 3.00	1	\$ 3.000	
POS Income	\$ 0.022	4	\$ 0.088	
Float (Minimum)	\$ 654.91		\$ 0.501	
<b>Sub-total</b>				<b>\$ 3.589</b>
<b>Customer Service</b>				
Teller Visit	\$ 1.15	2	\$ 2.300	
Reg E statements	\$ 0.50	1	\$ 0.500	
Lost and stolen call center	\$ 10.00	1%	\$ 0.100	
<b>Sub-total</b>				<b>\$ 2.900</b>
<b>Transaction Processing</b>				
On-us ATM transactions	\$ 0.1000	0	\$ -	
File hosting per month	\$ 0.0500	1	\$ 0.050	
POS transactions (4 POS)	\$ 0.1000	4	\$ 0.400	
Dep Deposit Processing	\$ 0.0570	1	\$ 0.057	
<b>Sub-total</b>				<b>\$ 0.507</b>
<b>ATM Expenses</b>				
Withdrawals	\$ 0.108	0	\$ -	
Balance Inquiries	\$ 0.083	0	\$ -	
<b>Sub-total</b>				<b>\$ -</b>
<b>Total recurring monthly costs for FI</b>				<b>\$ 3.407</b>
<b>Pre-tax Profit Contribution</b>				<b>\$ 0.182</b>
<b>Account Set-up Expenses</b>				
Account Origination Expenses	\$ 11.00			
Card Issuance	\$ 1.61			
<b>Sub-total</b>	\$ 12.61			<b>\$ 12.61</b>
<b>Government Contribution to Set-Up Expenses</b>	0%			<b>\$ -</b>
<b>Set-Up Expenses for Financial Institution</b>				<b>\$ 12.61</b>
<b>Months to Recover Set-Up Expenses</b>			<b>months:</b>	<b>69.3</b>
<b>7 yr NPV @ 15% (Hurdle rate)</b>				<b>(\$3.18)</b>

## Additional Direct Deposits

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Day	from FMS	% Withdrawn	Cum %	Float %	Float Balance	4.75%
0	\$ <b>855.96</b>					
	\$ -	0.00%	0.00%	100.00%	\$ 855.96	\$ 0.111
1	\$ 570.58	66.7%	66.66%	33.34%	\$ 285.38	\$ 0.037
2	\$ -	0.00%	66.66%	33.34%	\$ 285.38	\$ 0.037
3	\$ -	0.00%	66.66%	33.34%	\$ 285.38	\$ 0.037
4	\$ -	0.00%	66.66%	33.34%	\$ 285.38	\$ 0.037
5	\$ -	0.00%	66.66%	33.34%	\$ 285.38	\$ 0.037
6	\$ -	0.00%	66.66%	33.34%	\$ 285.38	\$ 0.037
7	\$ -	0.00%	66.66%	33.34%	\$ 285.38	\$ 0.037
8	\$ 142.69	16.67%	83.33%	16.67%	\$ 142.69	\$ 0.019
9	\$ -	0.00%	83.33%	16.67%	\$ 142.69	\$ 0.019
10	\$ -	0.00%	83.33%	16.67%	\$ 142.69	\$ 0.019
11	\$ -	0.00%	83.33%	16.67%	\$ 142.69	\$ 0.019
12	\$ -	0.00%	83.33%	16.67%	\$ 142.69	\$ 0.019
13	\$ -	0.00%	83.33%	16.67%	\$ 142.69	\$ 0.019
14	\$ -	0.00%	83.33%	16.67%	\$ 142.69	\$ 0.019
15	\$ 142.69	16.67%	100.00%	0.00%	\$ 142.69	\$ 0.000
16	\$ -	0.00%	100.00%	0.00%	\$ 0.00	\$ 0.000
17	\$ -	0.00%	100.00%	0.00%	\$ 0.00	\$ 0.000
18	\$ -	0.00%	100.00%	0.00%	\$ 0.00	\$ 0.000
19	\$ -	0.00%	100.00%	0.00%	\$ 0.00	\$ 0.000
20	\$ -	0.00%	100.00%	0.00%	\$ 0.00	\$ 0.000
21	\$ -	0.0%	100.00%	0.00%	\$ 0.00	\$ 0.000
22	\$ -	0.00%	100.00%	0.00%	\$ 0.00	\$ 0.000
23	\$ -	0.00%	100.00%	0.00%	\$ 0.00	\$ 0.000
24	\$ -	0.00%	100.00%	0.00%	\$ 0.00	\$ 0.000
25	\$ -	0.00%	100.00%	0.00%	\$ 0.00	\$ 0.000
26	\$ -	0.0%	100.00%	0.00%	\$ 0.00	\$ 0.000
27	\$ -	0.00%	100.00%	0.00%	\$ 0.00	\$ 0.000
28	\$ -	0.00%	100.00%	0.00%	\$ 0.00	\$ 0.000
29	\$ -	0.00%	100.00%	0.00%	\$ 0.00	\$ 0.000
30	\$ -	0.00%	100.00%	0.00%	\$ 0.00	\$ -
						<b>\$ 0.501</b>